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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,078

03/18/2004

Kia Silverbrook

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11/15/2006

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER

LIANG, LEONARD S

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/803,078	Applicant(s) SILVERBROOK, KIA	
	Examiner Leonard S. Liang	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Specification and Drawings***

The lengthy specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. Specifically, the applicant is required to match all references in the drawings to the references in the specification and drawings.

Claim Objections

Claim 1 is objected to because of the following informalities: It discloses "at least two the printheads..." It will be construed that the claim should state "at least two printheads..." Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

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ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 4-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-13, and 15-18 of copending Application No. 10/922968. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim limitations of the copending application completely anticipate the claim limitations in the current application, although the order and dependency of the claims are different.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8, 10-14, 16-20, and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwa et al (JP Pat 08267854) in view of Morgavi (US Pat 5558449).

Kashiwa et al discloses:

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- {claim 1} A printing and display device (figure 1); a flat panel display for displaying images from a computer (figure 1, reference 2); a printer (figure 1, reference 14)
- {claim 3} the device configured to receive print data to be printed, and display data to be displayed, from a computer system (abstract)
- {claim 4} wherein the printing and display device includes a connection configured to allow releasable operative connection of the computer system to the printing and display device, for receiving the print data and the display data from the computer system (abstract; as broadly recited, connections are releasable)
- {claim 5} wherein the connection includes at least one socket for accepting at least one corresponding data cable (figure 5; see socket receiving data cable)
- {claim 8} further including a paper feed mechanism for feeding paper to the printhead for printing, the printhead being arranged to print onto the paper (figure 2, reference 15)
- {claim 10} wherein the paper feed mechanism is configured to accept a single sheet of paper at a time for printing (figure 2, reference 15)
- {claim 11} wherein the paper feed mechanism includes a paper separator for feeding a single sheet of paper to the printhead from a stack of sheets of paper (figure 4, reference 22)
- {claim 17} device configured to enable printing of standard A4 or Letter sized sheets of paper (figure 2, reference 10)

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- {claim 18} device configured such that paper to be printed is fed manually into a paper path that directs the paper from a region adjacent the upper edge of the flat panel display, past the printhead for printing, then out of the device adjacent a lower edge of the flat panel display (figure 2, reference 10)
- {claim 19} further including a curved paper guide disposed, when the device is in use, beneath the flat panel display, such that the paper that has been printed is urged horizontally as it exits the device (figure 2, reference 17)
- {claim 20} wherein the flat panel display is of the following type: LCD (abstract)
- {claim 23} wherein the printhead is configured to print photographic images (abstract; the term photographic is broadly interpreted; it is well known that any printer that prints images can print photographic images depending on the data input to the printer)
- {claim 24} wherein the printhead is configured to print image and text data (abstract; depending on the data sent to the printer)
- {claim 25} wherein the computer system is a personal computer (abstract)
- {claim 26} a flat panel display for displaying images from a computer; and a printer, the printer including a printhead for printing onto the paper (figure 2)
- {claim 27} a flat panel display for displaying images from a computer; a stand for holding the flat panel display in an operative position; and a printer, the printer including a printhead for printing onto paper; wherein the stand includes at least one receptacle configured to accept at least one replaceable ink cartridge for supplying ink to the printer (figure 2)

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- {claim 28} a data connection for receiving print data from a computer; a flat panel display for displaying images received from a computer; a printer, the printer including a printhead for printing onto paper on the basis of the print data; and a data connection hub configured to allow connection of at least one data-receiving device to the printing and display device, enabling the data-receiving device to receive data from the computer (abstract; figure 2)
- {claim 29} a flat panel display; and a printer, including a printhead for printing onto paper; the device being configured such that, during printing, the paper being printed passes between the flat panel display and the printhead, or passes behind the flat panel display and the printhead relative to a viewing position of the flat panel display (figure 2)
- {claim 30} a flat panel display; a printer, including a printhead for printing onto paper; a multi-sheet paper holder; a paper sheet separator configured to separate a single paper sheet from the paper in the paper holder for supply to the printhead (abstract; figure 2; paragraph 0012; paper tray)
- {claim 31} the device including an interface, and being configured to receive, via the interface, input from a use indicative of a print command; send, from the printing and display device to the computer system, a print request; receive, from the computer system and in response to the print request, a document to be printed; and print the document (abstract)

Kashiwa et al differs from the claimed invention in that it does not explicitly disclose:

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- {claim 1} the printer including at least two printheads, the printheads being disposed on either side of a path through which print media is fed for printing, thereby enabling substantially simultaneous printing of both sides of the print media
- {claim 2} wherein a viewable size of the printing and display device exceeds 40cm measured along a diagonal of the printing device
- {claim 12} wherein the printer is a process color printer
- {claim 13} wherein the printer is an inkjet printer
- {claim 14} wherein the printer has more than 5,000 inkjet nozzles
- {claim 16} wherein the flat panel display measures at least 14 inches on the diagonal

With respect to claims 2, 12-14, and 16, even though the art is explicitly silent with regard to the specifics of the printhead and dimensions of the display, one of ordinary skill in the art would recognize the above limitations to be standards that are commonly used in the industry. If the above limitations were not implied in the invention of Kashiwa et al, the disclosed printing and display functions would be severely hampered.

Morgavi discloses, with respect to claim 1, a simultaneous two-face printing machine comprising two printheads disposed on either side of a path through which print media is fed for printing, thereby enabling substantially simultaneous printing on both sides of the print media (figure 1, reference 10, 11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Morgavi into the invention of Kashiwa et al.

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The motivation for the skilled artisan in doing so is to gain the benefit of printing on two sides of a media.

Claims 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwa et al (JP Pat 08267854) in view of Morgavi (US Pat 5558449), as applied to claim 1-5, 8, 10-14, 16-20, and 23-31 above, and further in view of Minemoto et al (US Pat 6188569).

Kashiwa et al, as modified, discloses:

- {claim 9} wherein the paper feed mechanism is configured to position the paper substantially parallel in at least one direction with respect to a plane defined by the flat panel display (figure 2, reference 15)

Kashiwa et al, as modified, differs from the claimed invention in that it does not disclose:

- {claim 6} wherein the connection includes a wireless receiver for receiving the print data and/or the display data
- {claim 7} wherein the connection is a Universal Synchronous Bus (USB) connection

Minemoto et al discloses:

- {claim 6} wherein the connection includes a wireless receiver for receiving the print data and/or the display data (column 5, lines 10-31)
- {claim 7} wherein the connection is a Universal Synchronous Bus (USB) connection (column 9, lines 44-52)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Minemoto et al into the invention of

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modified Kashiwa et al. The motivation for the skilled artisan in doing so is to gain the benefit of providing efficient data transfer.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwa et al (JP Pat 08267854) in view of Morgavi (US Pat 5558449), as applied to claim 1-5, 8, 10-14, 16-20, and 23-31 above, and further in view Steinfeld et al.

Kashiwa et al, as modified, teaches all limitations of the claimed invention except for the following:

- {claim 15} wherein the printer is a page-width printer

Steinfeld et al discloses, with respect to claim 15, the equivalence between a carriage mounted printhead and a pagewidth print head.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Steinfeld et al into the invention of Kashiwa et al. The motivation for the skilled artisan in doing so is to gain the benefit of reducing vibration in the printhead.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwa et al (JP Pat 08267854) in view of Morgavi (US Pat 5558449), as applied to claim 1-5, 8, 10-14, 16-20, and 23-31 above, and further in view Rylander (US Pat 5602572).

Kashiwa et al, as modified, teaches all limitations of the claimed invention except for the following:

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- {claim 21} wherein the printhead is configured to receive halftoned print data to be printed onto the print media
- {claim 22} further including a halftoning unit for generating halftoned image data and supplying it to the printhead for printing

Rylander discloses:

- {claim 21} wherein the printhead is configured to receive halftoned print data to be printed onto the print media (abstract)
- {claim 22} further including a halftoning unit for generating halftoned image data and supplying it to the printhead for printing (abstract)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Rylander into the invention of modified Kashiwa et al. The motivation for the skilled artisan in doing so is to gain the benefit of producing images that represent a greater range of shades.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mori et al (JP Pat 05181564 A) discloses a display device.

Yoshioka (JP Pat 06314137 A) discloses a handy information processor.

Sonobe (JP Pat 06059772 A) discloses an information processor.

Hara (JP Pat 04352228) discloses an information processor.

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Saito et al (US Pat 5731829) discloses an information processing and recording apparatus with two recording medium conveyance routes.

Agata et al (US Pat 5443320) discloses an information processing system with printing function.

Fushimi (US Pat 5186557) discloses a printer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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